

I. AMENDMENTS

IN THE CLAIMS

Please enter the amendments to claims 42, 45, 46, and 49, as shown below.

1-41. (Canceled)

E1 42. (Currently Amended) A method for producing a complete gp190/MSP1 protein of a *Plasmodium*, comprising expressing a nucleotide sequence encoding the complete gp190/MSP1 protein in a single [an] expression vector, wherein the adenine and thymine (AT) [AT] content of the expressed nucleotide sequence encoding the complete gp190/MPS1 protein is less than the AT content of a naturally occurring nucleotide sequence encoding a gp190/MPS1 protein.

F1 43. (Original) The method of claim 42, wherein the *Plasmodium* is a strain of *Plasmodium falciparum*.

44. (Original) The method of claim 43, wherein the strain of *Plasmodium falciparum* is *P. falciparum* strain PFB-1.

E2 45. (Currently Amended) The method of claim 42, wherein the AT content is reduced from about 74% to about 55%.

46. (Currently Amended) The method of claim 42, wherein the nucleotide sequence encoding the complete gp190/MSP1 is set forth in SEQ ID NO:2 [denoted gp190s in Figure 3C].

47. (Original) The method of claim 42, wherein the nucleotide sequence encoding a gp190/MSP1 protein further comprises a nucleotide sequence encoding an attachment signal.

48. (Original) The method of claim 42, wherein the nucleotide sequence encoding a gp190/MSP1 protein further comprises a nucleotide sequence encoding a signal peptide.

E3

49. (Currently Amended) The method of claim 42, wherein nucleotide sequence encodes a gp190/MSP1 having the amino acid sequence selected from the group consisting of amino acids 1-1639 of SEQ ID NO:3, 1-1621 of SEQ ID NO:3, and 20-1621 of SEQ ID NO:3 [, depicted in Figure 3C].

51-52. (Withdrawn)

53. (Original) The method of claim 42, wherein the expression vector is selected from the group consisting of dPS56RBSII, pBi-5, and ppTMCS.

54. (Original) The method claim 42, wherein the nucleotide sequence is expressed in an *Escherichia coli* (*E.coli*) strain.

F1

55. (Original) The method of claim 54, wherein the *E. coli* strain is DH5alphaZ1.

56. (Original) The method of claim 42, wherein the nucleotide sequence is expressed in an expression system selected from the group consisting of HeLa cells and CHO cells.

57. (Original) The method of claim 42, wherein the nucleotide sequence is expressed in an expression system selected from the group consisting of *Toxoplasma gondii* and *Leishmania*.

58-82. (Withdrawn)